UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/680,205	10/08/2003	Satoru Adachi	9683/261	7459

79510   7590   01/19/2010
NTT DoCoMo Inc/BHGL
P.O. Box 10395
Chicago, IL 60610

EXAMINER
PATEL, JAYESH A

ART UNIT	PAPER NUMBER
2624	

MAIL DATE	DELIVERY MODE
01/19/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>10 November 2009</u>.
2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>28-33</u> is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5)☐ Claim(s) _____ is/are allowed.
6)☒ Claim(s) <u>28-33</u> is/are rejected.
7)☐ Claim(s) _____ is/are objected to.
8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.
10)☒ The drawing(s) filed on <u>08 October 2003</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☒ All   b)☐ Some *   c)☐ None of:
      1.☒ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>12/22/09 and 9/25/09</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____ .

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/10/2009 has been entered.

Defective Declaration under 37 CFR 1.131

The declaration filed on 11/10/2009 is defective since it refers to the application # 12/191563 in the heading and in the body. The declaration should refer to the application # 10690205 in the heading and in the body. Please submit the new declaration reflecting the correct serial # 10680205 and the remarks in the declaration referring to the serial # 10680205. In view of the defective declaration the examiner maintains the previous rejection and the rejection is presented below.

Claim Objections

Claim 30 is objected to because of the following informalities: At line 1 encoding should read **decoding**. Appropriate correction is required.

Claim 33 is objected to because of the following informalities: At line 1 encoding

should read **decoding**. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 28-33 are rejected under 35 U.S.C. 102(e) as being anticipated by

Karczewicz et al. (US 20040066974) hereafter Karczewicz.

1. Regarding claim 28, Karczewicz discloses an image decoding method for

decoding coded picture data which is derived from: dividing **(partitioning a**

block larger than 4X4 by a plurality of blocks sizes 4X4,4X8 etc disclosed at

para 0032 and 0033) a matrix of image signal into blocks of different sizes **(para**

0032 , 0083,0084 and 0086 discloses blocks of different sizes); performing an

orthogonal transform on the respective blocks **(para 0035 and 0037 which**

discloses transform coefficients of the block); reading resultant orthogonal

transform coefficients into strings of transform coefficients while arranging a

single string of transform coefficients **(para 0043 and 0044 discloses the**

plurality of sequences of transform coefficients in interleaved manner) from a block larger **(8X8 block)** than a block of a minimum size **(4X4 block)** into shorter strings of transform coefficients each having a length equal to that of a string of transform coefficients from the minimum size block **(each sequence having length of 16 coefficients disclosed at para 0040)**; and entropy-coding the respective strings of transform coefficients **(para 0045 discloses entropy encoding the sub-sampled sequences of transform coefficients)**, the image decoding method comprising:

entropy-decoding the coded picture data to derive the strings of entropy-decoded transform coefficients **(Para 0090 which discloses the decoder 262 which regroups (derive) the coefficients into vector of length N, para 0095 discloses that the encoder and the decoder uses the same allocation pattern for the proper decoding or decoding is reverse of encoding)**;

combining the shorter strings of entropy-decoded transform coefficients back into the single string of entropy-decoded transform coefficients **(Figs 8a-8d and para 0088 which discloses the combining of the shorter strings by selecting every fourth coefficients)**; and

performing an inverse orthogonal transform on the single string of entropy- decoded transform coefficients in order to reproduce the matrix of image signal **(fig 10 discloses inverse transform at block 86 and para 0090 discloses decoder which suggests that inverse transform is being conducted)**;

wherein the coded picture data comprises entropy-coded **(para 0045 where entropy encoder id disclosed)** data representing strings of sixteen (16) transform coefficients obtained by interleaving **(Para 0040 – 0044)**, from a lower frequency coefficient, sixty four (64) transform coefficients of an orthogonally transformed 8x8 block to produce four (4) strings of sixteen (16) transform coefficients **(Figs 6a-6d where 4 coefficient strings of 16 coefficients are disclosed, para 0098 discloses a zig-zag scan which produces 4 strings of length 16)**,

wherein entropy-decoding the coded picture data comprises entropy-decoding the entropy-coded data of the respective strings of sixteen (16) transform coefficients **(para 0090 discloses decoder 262 which reverses the process of encoder and as described in para 0095 where the allocation pattern of the encoder and the decoder have to be the same in-order to decode the image correctly, figs 8a-8d discloses the selection of every fourth coefficient)**,

wherein combining the shorter strings of entropy-decoded transform coefficients comprises de-interleaving **(interleaving at the encoder becomes de-interleaving at the decoder)**, from a lower frequency coefficient, sixty four (64) transform coefficients from the four (4) strings of sixteen (16) transform coefficients to reconstruct the single string consisting of the sixty four (64) transform coefficients of the orthogonally transformed 8x8 block **(Figs 8a-8d where the string of coefficients of length 64 is formed from 4 strings by**

selection of the every fourth coefficients from the 4 strings, para 0088

explains the above concept), and

wherein performing an inverse orthogonal transform comprises performing

an inverse orthogonal transform on the sixty four (64) transform coefficients of

the orthogonally transformed 8x8 block **(fig 10 which discloses inverse**

orthogonal transform performed at block 86).

2. Claim 29 is a corresponding apparatus claim of claim 28. See the explanation

of claim 28.

3. Claim 30 is a corresponding storage medium claim of claim 28. See the

explanation of claim 28.

4. Regarding claim 31 see the explanation of claim 28.

5. Regarding claim 32 see the explanation of claim 29.

6. Regarding claim 33 see the explanation of claim 30.

Other Cited Prior art

The other cited prior art pertinent to applicant's disclosure but not relied on are

(US 5612788), (US 6597815), (US 6289131), (JP 06334990), (US

20030063809), (US 6427029), (US 20030161397) and (US 5021891).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAYESH PATEL whose telephone number is (571)270-1227. The examiner can normally be reached on 5-4-9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samir Ahmed can be reached on 571-272-7413. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAYESH PATEL/
Examiner, Art Unit 2624

/Samir A. Ahmed/
Supervisory Patent Examiner, Art Unit 2624